

# **Director's Report to the Fish and Wildlife Commission**

## **November 3-4, 2006**

### ***“A Sound Stewardship of Fish and Wildlife”***

We serve Washington's citizens by protecting, restoring and enhancing fish and wildlife and their habitats, while providing sustainable fish and wildlife-related recreational and commercial opportunities.

#### **FISH AND WILDLIFE GOAL:**

##### ***ACHIEVE HEALTHY, DIVERSE AND SUSTAINABLE FISH AND WILDLIFE POPULATIONS AND THEIR SUPPORTING HABITATS***

**Blue Mountain Elk Fence:** The Department has contracted with Anderson Contracting out of Pomeroy to construct Phase 2 of the Blue Mountain Elk Fence Reconstruction. As of October 18, 2006 (after two and one-half weeks of construction), the Contractor is on schedule for completion of the 4.4 miles of 8-foot elk fence by November 30, 2006, barring weather conditions that would prevent prosecution of the work. Up to this point, the weather has been excellent, even at the 4500-foot level where the work is taking place.

**Skookumchuck Hatchery Improvements:** The notice to proceed for the Skookumchuck Hatchery Project went out the week of October 23, 2006. The contract started November 1, 2006, with a scheduled completion date of May 30, 2007.

**Family Forest Fish Passage Program:** Staff worked with Interagency Committee for Outdoor Recreation (IAC) and Department of Natural Resources (DNR) on 07-09 DNR budget request legislation for \$10 million (possibly spread over several biennia) for stream inventories to identify fish barriers in watersheds with small forest landowners. Inventories are needed to meet legislative requirements to identify and fix worst barriers first in each watershed in this small forest landowner incentive program. This effort would also require additional TAPPS staff for training, supervision, and data management, and a web-based interface upgrade to current data base program.

**Multi-Agency Permitting Team (MAPT):** Washington State Department of Transportation (WSDOT) is in the process of hiring a new MAPT Coordinator. This position plays a very important role in facilitating communication between WSDOT project teams and the permitting agencies. The MAP Team attended an early project coordination tour of the next phase of I-405 expansion, from SR 520 to I-5. The project may impact numerous existing stream crossings, some of which may require fish passage improvements. On another project, we successfully negotiated a compensatory mitigation plan with WSDOT for the SR 20, Fredonia project. WSDOT was unable to provide sufficient mitigation onsite, so they agreed to enter into an agreement with other parties to participate in restoration efforts on No Name Slough. This project is also a pilot for use of the state of Washington's e-permitting website, so permit application documents were submitted electronically, and all documents are posted on the website.

**Middle Snake (WRIA 35):** Staff met with Ecology to reach a state caucus position on instream flows in Asotin Creek and the Tucannon River, following WDFW internal consultation with the Fish Program. Staff has been involved in numerous discussions with the team and the Planning Unit. Staff met with Ecology to discuss the latest instream flow proposal. Staff also attended the WRIA 35 meeting to provide technical backup to Ecology who presented a state discussion on instream flows for the Tucannon. At this meeting, flows were tentatively set for two stretches of the Tucannon. Glen Mendel was consulted and agreed to attend the meeting to present the serious situation that chinook are in. Staff informed the Nez Pierce tribe of the new proposal and has been instrumental in finding out answers to technical questions for the group.

**Yakima River Basin (WRIAs 37, 38, 39):** *Instream flow RHABSIM study – Cowiche Creek, Yakima County (WRIA 38)* – Staff completed field work by conducting the third (medium-flow) set of transect and survey samples for their RHABSIM (Riverine Habitat Simulation) study to quantify the fish-habitat benefits of flow restoration. Staff also participated in a review of the many camps and cabin owners on the east side of Snoqualmie, Chinook and White passes who rely on surface water supplies that may be shut off during inadequate water years. Ecology is seeking to make recommendations to the state Legislature on solving these water concerns. Camps and cabin owners are asked to participate in an online survey to help Ecology with these recommendations. Information is available online at [www.ecy.wa.gov](http://www.ecy.wa.gov), click on "cabin survey" in the right-hand column of the page.

**Spring Creek HPA Violation:** Staff responded to an ongoing Hydraulics Code violation on lower Spring Creek. Sunnyside Irrigation District admits to not obtaining an HPA, and stated that they do not intend to obtain a permit. Backhoes and other machinery were operating in the stream where coho, fall Chinook, and steelhead spawn and rear.

**Columbia River mainstem:** *E2SHB 2860 (Columbia River Partnership):* Staff attended the Columbia River Advisory Group meeting in Ellensburg. An Assistant Attorney General gave a presentation on rule making in general, and then gave more specific guidance on rule making on instream flows. After presenting background on the State Supreme Court Hillis Decision, he asked the advisory group to ponder the question on whether to submit a proposal to change the WACs specifically to meet Columbia River regulatory needs. During the meeting, Ecology mentioned other project proposals for funding were submitted and were being reviewed; they included the city of Kennewick aquifer recharge project, a Similkameen storage project, and the Columbia River exchange project. The advisory group is scheduled to meet monthly. Theresa Scott represented WDFW policy interests.

**2006 State of Salmon In Watersheds Report:** With the assistance of the Department of Agriculture, WDFW staff created maps delineating agricultural land conversion. Land conversion to residential and commercial uses in the Wenatchee Basin will be showcased in the next iteration of the 2006 State of the Salmon in Watersheds Report. Additional maps showing herring spawning areas, eelgrass distribution, and shoreline armoring in Puget Sound, Grays Harbor, and Willapa Bay were also produced.

**Oil Recovery From S.S. Catala:** Spill Team and Region 6 staff continues to work with Ecology on the oil recovery and salvage operations at the wreck of the S.S. Catala. Oil recovery operations at Damon Point will be secured for the season by October 20. The salvage contractors have removed all of the oil/water water from the known fuel tanks of the vessel. Several tanks in the rear of the vessel labeled as water tanks may have been used for fuel oil will not be examined until next season. A sheet pile barrier installed around the vessel will remain in place over the winter. Staff activities during this period included a site visit and working with Ecology and other trustees to finalize the plan for monitoring the site over the winter.

**Washington Conservation Commission:** Staff is working with Don Larsen, WDFW Natural Resource Conservation Service (NRCS) Farm Bill Coordinator, on keeping irrigated lands near streams a high priority for funding within the Farm Bill programs. Programs include CREP (Conservation Reserve Enhancement Program) and EQIP (Environmental Quality Incentives Program). We discussed how the Columbia River Partnership funding could facilitate the objective to save water in eastern Washington agricultural zones. Opportunity for projects needs to be inventoried and shared with NRCS and FSA (Farm Service Agency). NRCS and FSA appear to be outside their expertise when cataloging or developing fish and aquatic restoration projects. They intend to work on a proposal to be discussed with policy staff within Habitat and Wildlife.

**Cleaning up the Sound:** Staff issued a Puget Sound-wide general permit for the removal of creosote treated pilings to the Department of Natural Resources. This removal, funded as part of Governor Gregoire's efforts to clean up Puget Sound, will reduce and ultimately eliminate one of the primary sources of polycyclic aromatic hydrocarbons (PAHs) in Puget Sound, which are linked to significant (up to 100%) mortality of herring spawn and similar impacts to other forage fish species.

**Central Puget Sound Geographic Response Plan:** Staff working with Ecology developed recommendations for major changes to the Central Puget Sound Geographic Response Plan. The recommendations were based on a yearlong process to re-evaluate the plan based on trustee and public input, together with extensive fieldwork. Site visits were made to various locations to evaluate proposed revisions to the Geographic Response Plan for Central Puget Sound. This cooperative effort was sponsored by Ecology and included participation and assistance from the U.S. Navy spill response contractors, and other stakeholders.

**Washington State Ferries (WSF) General Maintenance HPA Compliance:** WSF reported at an annual meeting between WDFW and WSF that 28 maintenance and repair projects were conducted under their general maintenance HPA instead of under individual HPAs. WSF reported use of the general HPA has increased maintenance and preservation project efficiencies. At this annual meeting WSF also initiated collaboration with WDFW on future projects.

**Fish Passage Barrier Correction on State Highways:** WDFW conducted compliance inspections on three fish passage barrier correction projects funded by the Washington State Department of Transportation's (WSDOT) Environmental Retrofit Program (I-4) in the WSDOT North Central Region. The barrier culverts were initially identified during the WSDOT Fish Passage Inventory conducted by TAPPS Division staff. The projects were placed onto WSDOT's Six Year Barrier Correction Plan after TAPPS Division biologist and environmental engineer completed the biological and engineering scoping. This month, WSDOT replaced the fish passage barrier culverts with fish passable structures. In Okanogan County, WSDOT replaced culverts on Beaver and Frazer creeks that cross SR 20 at mileposts 205.84 and 206.85 respectively. The two newly replaced culverts on SR 20 are concrete bottomless boxes, providing unimpeded passage to over 100 linear kilometers of habitat for a number of salmon species and resident trout. In Chelan County, a total fish blockage culvert on Mill Creek, crossing U.S. Highway 12 at milepost 70.21, was replaced with an 11.6-meter (38-foot) wide, 100% passable culvert restoring access to over 11 linear kilometers of habitat for Chinook salmon, steelhead, bull trout and resident trout.

#### **Fish Passage Barrier Correction at Washington State Highways**

Beaver Creek 48.0307 tributary to  
Methow River  
State Route 20 Milepost 205.84



*Before – partial fish blockage*



*After – fish passage restored*

Frazer Creek 48.0309 tributary to  
Beaver Creek  
State Route 20 Milepost 206.85



*Before – fish passage barrier*



*After – fish passage restored*

Mill Creek 45.0956 tributary to  
Nason Creek  
U.S. Highway 2 Milepost 70.21



*Before – total fish blockage*



*After – fish passage restored*

**Box Canyon Dam License Implementation:** The Pend Oreille Public Utility District filed with the Federal Energy Regulatory Commission (FERC) another request to stay many of the license conditions scheduled for implementation in 2007. The request comes as a surprise given the many plans that were developed in coordination with WDFW and other agencies. With several plans being implemented in 2007, initial expenditures are estimated to be around \$2.84 million. Early phases of fishway implementation alone will cost \$1.9 million. All parties are still waiting for FERC to address rehearing requests and resolve many of the issues that are looming over implementation of major resource measures.

**Priest Rapids Hydro Project:** Major Projects staff reviewed terms and conditions recommended to the Federal Energy Regulatory Commission. Substantive evidence includes Department of Game information pertaining to a 1966 project-related impact assessment of the Columbia River mountain white fish fishery. The information was summarized and distributed internally. The summation of this assessment is that the white fish fishery was reduced from a pre-project 64,000 fish per year to 4,000 fish per year post-project (94% decline). Of 150,000 catchable rainbow trout planted in Wanapum reservoir as an experimental replacement program, the estimated return rate to anglers was 0.08 of one percent; or one fish was caught for each 1250 planted. Eighty seven percent of the anglers interviewed were found in the free-flowing Columbia downstream from Priest Rapids Dam.

**Outer Continental Shelf Alternative Energy Project Rule Development:** Major Projects staff attended an invitation-only meeting with the U.S. Mineral and Mining Service regarding new rules they are developing regarding the permitting/licensing of alternative energy projects on the Washington outer continental shelf. These rules will apply to projects out to 200 miles off the coast. The types of projects currently under consideration are for using wind energy, wave energy, ocean current energy, and hydrogen extraction. Major Projects staff requested that the rules include provisions for addressing protection and mitigation of impacts to fish, marine mammals, birds, and fishing activities. There is currently a disagreement on the jurisdiction of the U.S. Mineral and Mining Service (MMS) with the Federal Energy Regulatory Commission (FERC). The MMS is claiming authority over projects in water outside state waters (beyond 3 miles), and the FERC is claiming jurisdiction over hydropower projects (wave and current energy projects) up to at least 12 miles from the coast.

**Columbia Complex Fire Salvage Logging:** Staff has seen a significant increase in Forest Practice Applications for the Blue Mountains. All of them are related to the Columbia Complex Fire and salvage logging on private land-holdings. Salvage logging can be quite intense, but so far the landowners have been very willing to work with staff to reduce the impacts to listed species in affected streams. Staff has spent a significant amount of time in the field providing technical assistance to landowners on this issue. This timely response to requests is allowing landowners to get value off of their damaged timber while still protecting key habitat functions. With over 100,000 acres burned and much of it on private land, this pressure to salvage will continue.

**NOAA Releases Upper Columbia Salmon Recovery Plan:** The Upper Columbia Salmon Recovery plan is now out for public comment until November 28. The Upper Columbia Salmon Recovery Board (UCSRB) and NOAA Fisheries will host public meetings in both Okanogan and Chelan counties on the evenings of November 8 and 9 respectively. Before the public meetings, NOAAF will supplement the first federal register notice with additional information on All-H integration. Currently, UCSRB is refining some of the details related to cost of implementation the salmon recovery plan. Initial estimates are \$138 million for the first ten years.

**Federal and State Agency Partnerships a Success:** WDFW's Region 2 Habitat Program Manager Chris Parsons joined with USFWS Fish Biologist Judy Delavergne at a "hands on" Fish Habitat Workshop held in early October at the Leavenworth Fish Hatchery. Forty-five employees from the Washington State Department of Parks and Recreation attended the workshop to learn more about how to protect and enhance streams for fish habitat. After an educational lecture, the whole group gathered along the shoreline of Icicle Creek to view a variety of experiments in the river. The group learned how streams and their banks are measured and how fish interact within their habitat. The workshop was a fun way to share technical information and to have a field experience that State Parks staff will remember when they develop their own fish enhancement project or public environmental educational experiences at State Parks.

**Forest Practices:** Staff has been working with local DNR foresters on pre-harvest planning for upcoming timber sales in the SE region. They are planning harvests throughout the Ahtanum and Colockum areas, many of which are planned through the "Forest Improvement" program. These sales are not required to make money for the trusts and are intended for stocking control on dense stands. Many of the timber sales staff has reviewed are constrained by protective HCP requirements for spotted owls, as a minimum 50% canopy closure is required post harvest. Due to the relatively crude techniques used to measure canopy closure and DNR's insistence in harvesting to 51% canopy closure, staff are skeptical that HCP compliance is being met in all cases. DNR foresters seem interested in hearing our input, however, and the any new roads are generally planned to be deactivated or abandoned post harvest. Log mills in Leavenworth, Yakima, and Naches have shut down over the past year leaving no functioning mills remaining in central Washington. This is beginning to affect bids on timber sales in private and state forests because hauling costs to mills 150-200 miles away affect profit margins. Logging less than premium logs is no longer profitable. This may drive additional sales of private forestlands for development.

**Public Outreach:** Habitat Program and Wildlife Program staff participated for the third year on the Citizen Science project with Sunnyside Schools. Staff held a field trip with Sunnyside School 4<sup>th</sup> graders and cleaned out wood duck and songbird nest boxes installed on the Sunnyside Wildlife Area. This has been a great outreach project with some teachers working with WDFW over several years.

**Repairs to Skagit Groundwater Channel Enhancement Projects:** Repair work was completed at two of our developed groundwater spawning and rearing channels on the Skagit River in North Sound during September. Both sites, Park Slough and Powerline, were partially flooded during the storm event of October 2003 that was a 50-year event in the upper river adjacent to the projects. The river came out of its banks in these project areas washing silts and fine sands into a portion of each site. We had tried several techniques to vacuum the material off the gravel but without significant improvement. This year, we secured sufficient funding to drain the damaged areas with multiple large pumps and scrape out the accumulated fine materials with heavy equipment. The procedure went well and the damaged areas of Park Slough (about 300m<sup>2</sup>) and Powerline (about 800m<sup>2</sup>) were largely restored, including the natural groundwater percolation on which these sites rely for their success. Both are now fully ready for the strong chum and coho return expected this fall.

**Fish Passage Barrier removed on the L.T. Murray Wildlife Area:** Williams Pipeline finished the Umtanum Creek fish passage restoration on the LT Murray Wildlife Area. The pipeline crossing of Umtanum Creek has been a fish passage barrier for approximately 30 years. Umtanum Creek supports adult and juvenile steelhead. Acting on WDFW's request, Williams hired professional consultants and contractors and worked with WDFW Habitat Program staff to remove the barrier and design and complete a new "roughened channel" to provide passage for fish. Final revegetation of the site will be done this fall as we get cooler weather and more precipitation.

**Williams Creek Project Update:** Working with the Rocky Mountain Elk Foundation (RMEF), Eyes in the Woods, KBH Archers, and department biologists, staff captured and successfully instrumented a total of 20 bull elk (15 branched, 5 spikes) in the Williams Creek Unit (GMU 673) in Pacific County. As a result of this effort, we now monitor the radio signals from 31 bull elk (8 spikes and 23 branch-antlered). This is the second year of this study, which seeks to determine estimates of mortality rates by cause for this unit. We were not entirely satisfied with the distribution of transmitters last year in our initial capture, but were able to remedy this concern in the current effort.

Of the branched sample, five canines were collected from bulls 3 years of age or above. Blood samples were collected from 18 of the 20 elk for later DNA analysis. Ceilings and excellent visibility allowed us to thoroughly search the entire unit and this resulted in a representative sample distribution (spatial and age structure). Induction times of the Carfentanil/Xylazine immobilization mixture were excellent, with only two of the 20 bulls requiring a second dart. All but four groups of elk were along tree lines when first detected, probably the result of the dry weather, moon cycle, rut-related behavior, or a combination of each. We experienced a total of three mortalities and are compiling notes to document causes. The sample going into the modern firearm elk season is 23 branched and 8 spikes. The primary objective was to mark and gain an unbiased estimate of branched bull survival with a secondary objective to estimate spike survival. Spikes were neither detected nor were they in the position to be worked from the helicopter (they simply made it into the trees faster), resulting in a lower targeted capture sample. Our plans are to monitor the sample for at least two more years, and we will submit an RMEF proposal (Williams Creek Bull Mortality Phase Two) for the upcoming Production Advisory Committee meeting.

**Education, Environment and Economy:** Margaret Tudor and Nicole Ricketts recently attended the "E3: Washington" advisory council meeting with Governor Gregoire, William Ruckelshaus, Commissioner Doug Sutherland, Superintendent of Instruction Terry Burgeson, and other statewide leaders to launch the statewide comprehensive approach to optimizing environmental education. The statewide strategy, called E3 Washington (for education, environment, and economy), is sponsored by the Environmental Education Association of Washington (EEAW) to promote the interdisciplinary, real-world approach to lifelong learning. Partnering with EEAW at the local level are numerous representatives of government, civic groups, non-profit organizations, and businesses. Staff around the state will represent WDFW in the regional planning events, which will contribute to the statewide strategy planning efforts.

**Reardan Audubon Lakes Dedication:** District Biologist Howard Ferguson, Regional Wildlife Program Manager Kevin Robinette, and Public Information Officer Madonna Luers participated in the dedication of this new Interagency Committee on Outdoor Recreation (IAC) funded Watchable Wildlife Area. Also on hand were Wildlife Program Assistant Director Dave Brittell and Regional Director John Andrews. Also in attendance were many local residents and Watchable Wildlife enthusiasts from as far away as Western Washington. This project has been a cooperative effort between WDFW, the Inland Northwest Land Trust (INLT), the Spokane Audubon, and the Reardan Area Public Development Authority. Chris DeForrest of INLT was the Master of Ceremonies for the dedication, held on the property. Speakers included Susan Eastman (the former landowner), State Senator Bob Morton, Leslie Ryan-Connelly (IAC-WWRP), Dave Brittell, John Andrews, Howard Ferguson, Lincoln County Commissioner Deral Boleneus, Reardan Mayor Sherman Johnson, Dale Swant (Reardan Area Public Development Authority), and Spokane Audubon Society President Gary Blevins. After the dedication, participants retired to the local high school gymnasium for refreshments and to view informational displays. They then loaded a local school bus for a bird watching trip on the property. An outstanding event!

**Otolith Lab Staff Assisted Volunteer Groups in Chum Recovery Efforts In Hood Canal and Prepare to Thermally Mark the Offspring:** Personnel from the Otolith Laboratory participated with local volunteer groups and Long Live The Kings to continue an on-going summer chum recovery effort taking place in Hood Canal and the Strait of Juan de Fuca. Staff helped spawn summer chum and collected biological information on each adult fish used as broodstock throughout September and into early October. Every fish produced from this effort is thermally marked to assess survival and distribution patterns. Otolith Lab personnel are currently developing unique otolith codes and beginning the marking programs for the Lilliwaup, Union, Tahuya, Hamma Hamma, and Jimmycomelately summer chum salmon recovery programs.

**South Fork Stillaguamish River Fall Chinook Supplementation:** Co-Managers for the Stillaguamish River; the Stillaguamish Tribe, Tulalip Tribes and WDFW, recently met to discuss initiating a supplementation program for South Fork Stillaguamish River fall Chinook. The co-managers discussed the risk that a catastrophic event (i.e., flooding, major slide, scouring, etc.) could force the extinction of the South Fork Stillaguamish Chinook stock. The Technical Recovery Team (TRT) has identified the South Fork Stillaguamish stock, along with the South Fork Nooksack and Cedar River stocks, as having the greatest immediate risk of extinction among Puget Sound Chinook stocks. These discussions yielded co-manager agreement to begin a conservation program that could be initiated as early as 2007. The purpose of the program would be to artificially increase the number of natural origin spawners (NORs) above current levels to reduce extinction risk due to catastrophic events and provide enough spawners to challenge any freshwater habitat improvements. Using the AHA model the program size was determined to be 30 NORs (ideally 15 spawning pairs) from across the run and produce 45,000 age-0 smolts for release (not taking more than 50% of the return to the SF Stillaguamish River in any given year).



**Strong Return of Chinook to the Dungeness River System:** Chinook are returning to the Dungeness River in higher numbers than seen in recent years. The rebuilding program for the Dungeness Chinook has resulted in about 1,400 Chinook returning to the river through week 40 as spawning nears completion. Previous season highs have been in the 1,000 range. Not only are more Chinook showing up but the distribution of spawning shows a marked change from previous years in that the upper Dungeness and Gray Wolf are getting higher numbers and a larger proportion of the spawning. One of the goals of the rebuilding program has been to re-program spawning into portions of the upper watershed that historically supported these fish. The habitat in the upper watershed is considered more capable of supporting natural production because the stream's bed load is more stable than in the diked areas further downstream. Relatively high river flows during the early migration may have contributed to the redistribution of spawning upstream. The proportions of natural and hatchery origin Chinook on the spawning grounds will be estimated from coded wire tag and scale data in the months to come.

**Cedar River Chinook Surveys:** The 2006 Chinook redd counts in the Cedar River are on pace to exceed the highest total since counts began in 1999. Crews have located more than 350 Chinook redds in the Cedar so far this year, which is ahead of the same time in any other year. The highest season total was 470 redds in 2004. Prior to 1999, only live Chinook observed on weekly surveys were used to compute escapement estimates because many Chinook redds are indistinguishable from sockeye redds, especially in areas with dense sockeye spawning. Through a cooperative effort by King County, Seattle Public Utilities and WDFW, biologists are able to enumerate Chinook redds in the Cedar by surveying more frequently (up to three times per week) to observe female Chinook still attending redds. The co-managers have had discussions to initiate using escapement estimates derived from the redd counts rather than the historical live count Area Under the Curve methodology.

We are also pleased that the increased number of redds are not simply due to a higher than usual number of hatchery strays into the Cedar from the Issaquah Hatchery. To date, 80 percent of the more than 70 female carcasses sampled have been unmarked.

**Forest Practices Board:** The Forest Practices Board (FPB) heard testimony on the proposed Perennial Initiation Point (PIP) rule. This is the first rule change to emerge from the Forest and Fish Habitat Conservation Plan (HCP) adaptive management program. Oral testimony provided by timber company representatives and their consultants unanimously opposed the proposed rule. The main objection to the rule surrounds the inconsistent identification of the PIP in the field when using the Forest Practices Board Manual (as identified in the rule). The location of the PIP has significant ramifications for how much stream buffer forest landowners are required to retain. Further objections centered on the cost-benefit analysis. October 13 was the final date for written comments on the rule. DNR's Forest Practices Division will provide FPB members with a summary of the comments received prior to the November 1 meeting where the FPB is scheduled to decide whether to proceed with the rulemaking.

**Sea Lion Aerial Surveys:** Steve Jeffries conducted sea lion surveys in WDFW's Cessna 185 on September 5-6, 2006. The survey covered Oregon and Washington coasts including the Columbia River. An estimated 1,200 California and 1,000 Steller sea lions were present on the south jetty of the Columbia River. Another 1,000 California and 800 Steller sea lions were spread out at several sites along the Olympic Peninsula.

**Willapa Bay Field Station:** Staff responded to a large California sea lion stranded on the Long Beach Peninsula. However, this animal was located inland ½ mile from the beach, right in the middle of a county road. This appeared to be the same California sea lion that was stranded on the beach (off the Oysterville beach approach) a few days earlier. Biologist Bruce Kaufman and Scientific Technician Alan Sarich, along with WDFW Enforcement Officer Spurbeck, used two hoop nets to capture the animal and transport it back to the ocean beach. During the capture process, the rescuers quickly found out that trying to use just one hoop net did not work since the agitated sea lion was able to easily throw it off. In the midst of the netting attempts, the animal made a charge at the group of onlookers gathered. That crowd of locals, who had been observing the fun, quickly scattered. The sea lion then made a run (these things are pretty darn fast!) for the nearby woods, with the WDFW crew in hot pursuit. Using two hoop nets they were able to finally subdue the animal and lift it in the bed of Officer Spurbeck's patrol vehicle.



*Chinook Observer Oct. 25, 2006*

On the trip to the beach, the Willapa staff accompanied the sea lion in the back of the truck, doing their best to keep it from jumping out. Once it was finally released the sea lion wasted no time in getting back into the ocean. A picture of the sea lion (nicknamed "Andre" by the gathered locals) made the front page of the Chinook Observer.

## **PUBLIC GOAL:**

### ***ENSURE SUSTAINABLE FISH AND WILDLIFE OPPORTUNITIES FOR SOCIAL AND ECONOMIC BENEFIT***

**Investigation of Clam Thefts:** Officers secured four search warrants related to a theft of thousands of pounds of hard shell clams from a state beach. The suspect had leased some very unproductive clam growing area adjacent to the state beach. Officers developed cause to believe that clams were harvested from the public land and then certification tags were falsified in an effort to represent them as legally harvested from the clam-poor leased area. Officers served four warrants at two businesses, a residence, and the harvest grounds. A special thanks goes to Biologist Bruce Kauffman who provided critical assistance to evaluating the clam growing potential of the leased ground.

**Hunt Requirements Last Minute Rush:** Hunter Education staff was inundated by hunters who had lost or couldn't locate their completion cards; were having problems due to the Outdoor Central System; and/or wanted a last minute class so they could go hunting on the opening weekend. Staff worked diligently and satisfied most requests in order to get people into the woods.

**Fatal Hunt Accident:** A fatal hunting accident occurred opening day of general season near Monroe involving three young men hunting on farmland adjacent to the Department's Crescent Lake release area. The shooter told sheriff's detectives he heard brush crack and saw "a shadow" of movement, so he fired his 30-30 twice into the brush, killing his friend. The victim wore no hunter orange and both the victim and the shooter were unlicensed. WDFW's Officers will work with the sheriff's office on the investigation.

**Illegal Net Investigation:** Thanks to the ongoing collaborative effort with the Diking Districts in Skagit County on HPAs WDFW's Region Four Captain received information that a possible illegal net was in Indian Slough. Officers located the net and found one cork with a name written on it. Several dead river otters were next to the net and had undoubtedly drowned in it. Officers and Swinomish Tribal Enforcement confirmed that the net was in closed waters. The net was pulled and seized. The name on the cork was that of a Swinomish fisherman who was taken back to prison earlier in the day for parole violations. The Diking District was pleased with the results when reported back to them.

**Private Timber Land Hunting:** Officers contacted four Muckleshoot Tribal hunters who had taken three deer on the private property of Hancock Timber Resources. Officers were dealing with a local hunter when they observed their pickup stop down the road abruptly. Officers approached the vehicle and the driver rolled down the window and stated they had got three. Officers inspected the three deer and found one spike a two point and a doe – none of which had tags on them. The tribal member jumped back into the truck and dug out three Muckleshoot hunting tags that all appeared to have been hastily filled in and none of the tags were notched just filled in with pen. The Officer took their information for future reference. WDFW's Region Four Captain has been in communication with A.G. Shelia Lynch and plans to meet with the Chief of the Criminal Division of the King County Prosecutor's Office soon to discuss filing decisions regarding treaty hunting on privately-owned commercial timber properties.

**Participation in Tribal Hunting:** Officers contacted a Colville member and a non-tribal subject parked in a vehicle near Bonaparte Lake. The tribal hunter had a valid tag but the rifle and shotgun belonged to the non-tribal subject who denied hunting. Both subjects were cited for loaded firearms in a motor vehicle and warned about participation in tribal hunts.

**Weyerhaeuser Spotighting Emphasis:** Officers set up a decoy patrol to address spotighting issues. One subject was cited for Spotighting. Officers were about to take down the decoy when a vehicle was observed going behind a locked Weyerhaeuser gate. The vehicle came back out about 20 minutes later and shined their headlights on the decoy and drove off. Officers stopped the vehicle and found that the subjects had a fresh, forked-horn buck and no guns. The deer had not been properly tagged; they used an illegal key to open the gate and were in possession of illegal substances. Several citations were written.

**Spotighting/aircraft Emphasis in West Lewis County:** Ten Fish and Wildlife Officers from Regions 5 and 6 participated in the night patrol. At the briefing, Officers were trained on how to use their GPS/TOPO (Global Positioning System/Topographical) equipment effectively during the patrol. As aircraft circled over the spotlighter, an Officer radioed GPS coordinates to ground units. Officers entered waypoints into their TOPO system. Using their GPS, they could track their own position while en route to the spotlighter. Officers made over a dozen arrests for spotighting, small game, felon in possession of firearms, alcohol and driving violations. Thanks to Officer Martin for organizing the emphasis.

**HPA Investigation:** Officers investigated a reported HPA violation with an Area Habitat Biologist (AHB) that was provided by Sheriff Gary Lucas. It involved a water diversion issue in the Autumn Hills subdivision and is ongoing. Officers photographed small sediment catchers with hoses coming out and hundreds of feet of hose going down a small stream to a property below the subdivision. Officers have been in contact with Clark County Deputy Chaney, who initially investigated the water diversion. The AHB is investigating the situation with the departments of Ecology and Health.

**Fisherman Cited for Not Complying:** Officers contacted a commercial purse seine fisherman in Blaine who had refused to allow agency fish samplers onboard as he was fishing chum near Pt. Roberts. The skipper was very profane and verbally abusive toward the samplers. The fisherman later admitted that he had denied the observers access to his boat and felt that he did not have to allow them onboard. He indicated that by allowing them onboard, it would just give WDFW more information that would be used to ruin the commercial fishery. Officers explained that he was required to allow them onboard and issued the man a citation for the violation. Written statements from Fish Management staff are forthcoming.

**Catch Cards:** Officers worked sturgeon anglers. Lots of sturgeon being caught and we're seeing catch cards with 4 and 5 fish (5 fish limit) recorded since October 1. The altering of catch record cards and purchases of duplicate cards are suspected to be a problem. Six citations were issued for catching another's limit. Officers will follow up on one altered catch card.

**Marine Officers Serve Search Warrant:** Search warrant served on hunting violators by WDFW Officers at Sequim residence. The suspect, a convicted felon, had shot six deer throughout the past month and reportedly still had remains of some of them at his residence. The search yielded two separate deer, an unused 2006 deer tag (he also purchased a duplicate tag), archery equipment, firearms, marijuana & paraphernalia, and statements from the suspect and his accomplice admitting to the crimes.

### **Joint Investigations:**

1. **Illegal Deer Hunt Activity** – Officers responded to a spotlighting violation call in Columbia County. He caught the two with additional violations of Felon in possession and cocaine paraphernalia. The subjects had a loaded .44 Ruger Blackhawk in front with a large spotlight plugged in, sheets and a tarp in back, and excuses for spotlighting several deer. A Columbia County Sheriff's Deputy responded to assist with the search and transport.
2. **Coop Game Meat Efforts** – An Oregon State Patrol Trooper contacted Officer Johnson about a possible illegal Washington deer hanging in a meat locker in Oregon. The Trooper also told Johnson about a possible outlet in Walla Walla for the sale of game meat from both Oregon and Washington. The Trooper will contact Johnson later with more information. Officer Johnson returned the favor by providing information about two poached bull elk near Tollgate.
3. **Case Closed** – Officer Hahn along with Montana Fish, Wildlife and Parks, Department of Conservation, and the U.S. Fish and Wildlife Service wrapped up an investigation, which lead to a subject in Montana being cited for killing a mule deer buck without a license and unlawful transfer of a license. His brother, who lived in Spokane, was cited for unlawful possession of a deer in Montana. Officer Hahn had already cited the brother for doing taxidermy work without a license.
4. **Non-Resident Bust** – Officer Hahn assisted Montana again this week with another lengthy investigation. The investigation led to a subject in Montana being arrested for two counts of outfitting without a license, two counts of unlawful possession of a license, wasting antelope, conducting commercial activity on U.S. Forest Service property without a license, complicity to hunting without a license, possession of an eagle feather, and a \$25,000 arrest warrant for larceny out of Wyoming. Another client of his was cited for hunting without a license.

**Chelan County Arrest:** Officers were patrolling the Stemilt Basin one evening for unlawful ORV activity when they contacted a 19-year-old convicted felon accompanied by a 14-year-old female in an area that is closed to vehicles. The Officers interviewed the two subjects, and then arrested the 19-year-old man on statutory rape charges and the vehicle violation. The female was returned to her family and the male subject booked into the Chelan County Jail.

**GoHunt Enhancements:** Thanks to the extra effort of John Talmadge and Randy Krueziger, over 180 WDFW wildlife area unit maps were created and made available for download by the public from the GoHunt website. These small format maps (8" x 11" PDF) can be selected, viewed, and downloaded from the GoHunt startup page. In addition, high resolution, color aerial photos (orthophotography) provided by DNR (Washington Department of Natural Resources) are available for state and private forestlands in the south half of the state.

**Blue Lake Rehabilitation:** Staff from the Regions and Olympia are wrapping up the rehabilitation of Blue Lake this week. This rehabilitation is an important step in re-establishing high-quality trout fisheries in one of the premier lakes of Region 2. In the first week of November, we anticipate completing the rehabilitation of adjacent Park Lake.

## **Early Hunting Season Summary:**

*Deer* – The general consensus was that the modern firearm deer opener was pretty quiet. Bluebird weather and low hunter densities resulted in limited harvest across the state. Often, harvest levels pick up as the black-tailed and white-tailed deer general seasons go on into late seasons. Due to fire access closures in the Okanogan, there was relatively light hunter visitation at the check stations, but harvest success seemed to be a little higher than normal. Reports from Region Three indicate mule deer harvest was exceedingly poor. This was anticipated due to relatively high over-winter mortality.

*Upland Birds* – The Eastern Washington upland bird season opener was pretty slow. Pheasant production appears to have been poor, and hunters are not finding very many birds. Chukars are spottier, with poor production along the Snake River, but a little better along the Columbia River especially in Douglas County. Quail hunting appears to be down from last year, but still better than the long term. Quail continue to be the bright spot for upland bird hunters. So far, we have limited reports on grouse harvest, but the check stations in northeast Washington did see more birds come through than in past years.

*Waterfowl* – The waterfowl opener was also a little slow. Hunting on the Yakama Nation Reservation may have been the best around the state with checks indicating almost 5 birds harvested per hunter. Other areas were spotty and low water conditions in the Potholes area made boat access difficult. Waterfowl hunting should pick up later as migrating populations move down.

**Upper Columbia Steelhead:** The Mainstem Columbia River opened to steelhead fishing on October 21. This fishery allows anglers to catch hatchery-origin steelhead consistent with the Department's conservation objective to increase the relative proportion of natural-origin steelhead on the spawning grounds. The fishery reflects an ESA success story that demonstrates conservation and recreation are not mutually exclusive. Regional enforcement and fish program staff will monitor fishing effort to ensure that the fishery is consistent with ESA permit 1395.

**Razor Clam Season:** The October razor clam opener was very successful. All beaches were opened for evening low tides on October 6, 7 & 8 with Long Beach and Twin Harbors continuing through October 9. A total of 56,000 digger trips were made with a total of 810,000 clams harvested coast-wide (not including Kalaloch where the data collected by Olympic National Park has not yet been received). The number of digger trips was up considerably over the October 2005 opener (with 32,000 digger trips). The average size of the clams harvested ranged from 4.3 inches at both Long Beach and Twin Harbors and 4.7 inches at Copalis. The excellent weather and surf conditions and the fact Oregon's beaches are closed (due to domoic acid over the action level) were the likely reasons for the increase in effort.

**North Pacific Fishery Management Council (NPFMC):** The NPFMC met in Dutch Harbor, Alaska from October 2-9, 2006. Agenda issues included preliminary TACs for 2007, Bering Sea Essential Fish Habitat, developing sector allocation splits for Pacific cod between the Bering Sea and the Aleutian Islands, development of the Aleutian Islands Marine Ecosystem Forum and Fishery Ecosystem Plan, and a review of aspects of Bering Sea crab rationalization after the first year of the program.

**Cowlitz Adult Hatchery Coho Providing Additional Recreational Opportunity:** The Washington Department of Fish and Wildlife (WDFW) is working to maximize recreational fishing opportunity on a large adult hatchery coho return to the Cowlitz Salmon Hatchery, as well as providing fish to Northwest food banks.

An estimated 50,000 to 60,000 adult coho are expected to return to the hatchery this fall, and similarly large returns are anticipated at other southwest Washington hatcheries. The large return is due primarily to new recreational and commercial fishing constraints implemented for the first time in the lower Columbia River to protect naturally spawning coho newly listed as threatened under the federal Endangered Species Act.

The large numbers of coho making their way back into the Cowlitz River present WDFW with a unique opportunity to maximize angler opportunity on returning fish. Thus far WDFW has:

- Increased the daily bag limit on adult coho from two to four fish per day for anglers fishing from the Cowlitz River mouth to Mayfield Dam. That increase, which took effect today, October 20, will remain in place until December 31.
- Arranged with Tacoma Power to recycle some coho presently in hatchery ponds to Riffe Lake to provide additional recreational fishing opportunity. The transport began October 19.
- The October 20 revised fishing rules allow angling up to 100 feet below the hatchery barrier dam. Previously, fishing was prohibited within 400 feet of the barrier dam.

WDFW fish managers also are working to identify other ways to provide additional fishing opportunity on adult coho returning to the hatchery. The hatchery operates under a management plan developed as part of the federal licensing requirements for Tacoma Power's hydroelectric projects.

**Coastal Dungeness Crab Fishery:** IRM staff continued their work with representatives of the coastal Dungeness crab fishery in an attempt to reach a consensus on how to structure the opening of the state fishery along the Washington coast. Despite respectful and comprehensive discussions between Columbia River and Westport based crab fishers, little progress has been achieved. The Department is now faced with formulating a state opening structure absent a majority of the industry having a "buy-in" in the structure. Staff will be formulating a structure that is consistent with the guiding principles presented at the Commission's October meeting in Olympia.

IRM staff has continued to pursue discussions with each of the four coastal treaty Indian tribes in an effort to reach agreements on state-tribal harvest management plans for the 2006-2007 fishery. We have completed an agreement with the Quileute Tribe. We are making good progress with the Makah and Hoh Tribes. Progress is slow with the Quinault Indian Nation, but additional talks are scheduled.

The first crab condition tests are being completed this week. Early indications along the entire West Coast are that crab are in better condition than last year and an extended delay is unlikely to occur as it did last season.

**Pacific Fishery Management Council Allocation Committee:** IRM staff attended the Pacific Fishery Management Council's Allocation Committee meeting the week of October 16 in Portland. The purpose of the meeting was to develop a suite of alternatives for long-term intersector allocations for analysis. These alternatives would be analyzed in a draft Environmental Impact Statement and would include an amendment to the Council's Groundfish Fishery Management Plan (FMP). One potential use of the long-term intersector allocation regimes is to further the Council's work in considering a dedicated access program for the groundfish trawl fishery. The Allocation Committee developed a range of alternatives that, at this point, includes one using historical catch data (1995-2005) and a couple of them that focus on recent catches (2003-2005) and projected 2007-2008 allocations. The groundfish species under consideration range from status quo (maintaining current allocations for sablefish, Pacific whiting, and nearshore species) to all species and species complexes in the FMP; there is also an alternative that includes all species except those designated as "overfished." Specific set asides that take into account harvest for tribal fisheries, research, and experimental fisheries have yet to be developed. The Allocation Committee will meet again in mid-December to focus on further development of the trawl dedicated access program alternatives.



## FUNDING GOAL:

*ENSURE EFFECTIVE USE OF CURRENT AND FUTURE FINANCIAL RESOURCES IN ORDER TO MEET THE NEEDS OF WASHINGTON STATE'S FISH AND WILDLIFE RESOURCE FOR THE BENEFIT OF THE PUBLIC*

**Boating Facilities Program Funding:** WDFW boating facilities projects scored well in the recent Interagency Committee for Outdoor Recreation grant competition. Six of the seven projects WDFW presented were approved and funded for over \$1,500,000 dollars. Specific project approvals include: Silver Lake Region One Boat Access Redevelopment; Pleasant Harbor Region Six Boat Access Redevelopment; Eloika Lake Region One Boat Access Redevelopment; Jameson Lake Region Two Planning/Permitting Grant; Point No Point Region Six Planning/Permitting Grant; and Sidley Lake Region Two Planning and Acquisition Grant.



## COMPETENCE GOAL:

### ***IMPLEMENT PROCESSES THAT PRODUCE SOUND AND PROFESSIONAL DECISIONS, CULTIVATE PUBLIC INVOLVEMENT AND BUILD PUBLIC CONFIDENCE AND AGENCY CREDIBILITY***

**Regular Conference Calls with Regional PHS/GMA Biologists Re-Started:** PHS/GMA (Priority Habitats and Species/Growth Management Act) Regional Biologists will be sharing information and ideas via regular monthly conference calls coordinated by Jennifer Hayes, PHS/GMA Coordinator in Olympia. The first in this new schedule of calls were held October 3, when the biologists discussed local habitat assessments, WDFW's buffer recommendations, and upcoming PHS list updates. The two-hour conference calls include a roundtable discussion from each of the regions to share concerns, good ideas, and innovations in working with local planning partners to achieve fish and wildlife protection under the GMA and through the PHS program. Anyone from the agency is welcome to attend the conference calls or suggest agenda items relevant to the work of PHS/GMA biologists. The calls will be held the second Wednesday of each month from 10:00 AM to Noon, room 585. Contact Jennifer Hayes at (360) 902-2562 for more information.

**Cases Not Prosecuted:** The Spokane County prosecutor's willingness to pursue fish and wildlife prosecutions has become increasingly worse. The head of District Court prosecutions asserts a variety of rationalizations to support his total indifference to fish and wildlife cases. He has apparently imparted his values on all of his deputy prosecutors. They fail to communicate with our Officers on cases, they are failing to file our complex investigative cases, and now appear to dismiss any case that a defendant pleads not guilty on. Captain Whorton and Sergeant Rahn both have spoken to the prosecutor and have been provided broken commitments for improvement. Chief Bjork has contacted the county prosecutor and they will meet to discuss case adjudication.

**Hawk Enters Trap for Doves:** A sharp shin hawk entered a live trap set to catch rock doves (pigeons). Gary Chittum, KING 5's environmental reporter, was on the scene as WDFW Officers arrived and caught the entire agency response/rescue on film. The incident involved Sergeant Chandler calling in a ladder truck from the Seattle Fire Department, closing down the road, and our Sergeant ascending the ladder to ultimately remove the hawk from the trap. This incident got some really good coverage and the agency shined but the story and television time continued throughout the week. A day or two later another hawk believed to be injured or sick ended up being captured on a school playground somewhere close by. The hawk was taken inside the school and it escaped inside the janitorial supply room requiring a recapture effort. Gary Chittum was on scene and not only captured this successful rescue effort but also participated personally in the capture (Gary threw rolls of toilet paper attempting to scare the bird to Sergeant Chandler who was attempting to catch the bird with a net). This incident also had a very positive spin to it for the agency but the story didn't end here either. Early the next morning the hawk, apparently accustomed to the easy pickings in the pigeon trap, returned and caught itself once again. Sergeant Chandler returned and this rescue effort was also caught on film and ran all day on KING 5.

**More Town Meetings Set:** Officers held a public meeting in Shelton designed to be an open and candid discussion in a “town meeting” environment. Although the attendance was light, the members of the community that participated seemed very pleased to have had the opportunity to meet with their local enforcement officers, ask questions, express concerns and exchange stories. Two more “Town Meetings” are set in Region Six including one in Gig Harbor and the other in South Bend.

**Snow Goose Hunt Plan Update:** WDFW’s Region Four Captain facilitated a Fir Island resident/landowner meeting to discuss the progress of the collaborative effort in developing the comprehensive snow goose hunting plan. Officers followed up the general meeting with an “Eyes in the Woods” class that was well attended by volunteers of the Western Washington Waterfowl Association and the local residents. The residents are impressed with our progress and cautiously optimistic about this hunting season. Those that attended the CORT class have begun developing a working relationship with local hunters willing to volunteer their time to resolve reported problems. The first flight of snow geese (about 10,000 birds) arrived in the Skagit and spent much of their time on the reserve. Residents that have been aggressively critical of hunter behavior in the past were contacted and advised as well as invited to the next agency public meeting. These same critics are very appreciative to have personal visits, are impressed with WDFW’s response to their concerns, and mentioned their optimism of having a good hunting season.

**Ocean Policy Working Group:** IRM staff attended a meeting of the Ocean Policy Working Group the week of October 9 to refine the ocean policy recommendations and determine funding priorities for the final report, which is due at the end of the year. A completed draft report will be available on the ocean policy website for public review at the end of October; comments will be received during the month of November. Comments and suggested changes will then be incorporated into the final report in December.

The recommended long-term governance structure continues to be a coordinated state-level team similar to the current working group, that is, a formalized committee comprised of representatives from key state agencies such as Fish and Wildlife, Ecology, Natural Resources, and Community, Trade and Economic Development. Coordination of and staff support for the team would be the responsibility of the Department of Ecology. Working Group members continued to support having dedicated seats on the team for the coastal tribes and counties; however, there is a concern that, once non-state government seats are created, it may be difficult to limit participation. The Governor’s Office, in particular, is concerned that the resulting group may become too large and unwieldy to be productive. At a minimum, the tribes and county representatives, and local constituents, would be invited to participate in team meetings and act in an advisory capacity.

**WDFW Co-recipient of National Conservation Award:** Washington Department of Fish and Wildlife (WDFW) and the Asotin Conservation District recently received Conservation Partnership Awards from the U.S. Department of Agriculture, for their work in the restoration and protection of natural resources in the Asotin Watershed in southeast Washington. The awards were presented on October 26 by Under Secretary for Natural Resources and Environment, Mark Rey, and Washington Congresswomen Cathy McMorris, U.S. Fifth Congressional District Representative. WDFW Regional Director John Andrews accepted the award for the agency.

**The 2006 Puyallup Fair:** The 2006 Puyallup Fair closed on Sunday, September 24<sup>th</sup>. Fair attendance this year was 1.1 million people, up more than 14,000 from last year. Conservative estimates (based on 10% of daily attendance records for the days WDFW activities were staffed) would have at least 75,000 people enjoying our hugely popular exhibits and activities. Our Marine Touch Trays and Kids' Catch and Release Fishing Pond have become "destination" exhibits for families and kids of all ages. Approximately 4,000 kids (3 to 12 years old) fished in the pond, observed by family and friends and an audience of thousands. The Outreach/Fish Program iced-up some Chinook and a sockeye for public viewing. This year, Enforcement and Wildlife staffed a "Coexisting with Wildlife" exhibit (those psycho-terrorist raccoons again) and a display promoting WDFW license plates. Outreach/Fish Program thanks all who contributed to making this massive annual effort the resounding success it has become!



## SCIENCE GOAL:

### ***PROMOTE DEVELOPMENT AND RESPONSIBLE USE OF SOUND AND OBJECTIVE SCIENCE TO INFORM DECISION-MAKING***

**Avian Influenza (AI) Activities:** As of October 18, 2006, 605 swab samples have been submitted for AI testing. In addition, a total of 19 carcasses were submitted for testing. Lab results from 495 swab samples and 11 carcasses have been received (one of these carcasses was not tested). A total of 455 swab samples have returned negative results for AI viruses. All 10 carcasses tested were negative for AI. One swab sample from a western sandpiper, 32 swab samples from mallard ducks, and 7 swabs from American green-winged teal have tested positive for an AI virus. Four of the 35 mallards that had positive AI results were positive for an H5 strain of avian influenza virus, but negative for N1.

**Impacts of Dredging on Freshwater Mussels:** Staff completed the field study aspects of the Similkameen River freshwater mussel study investigating the impacts of dredging on freshwater mussels, and staff removed all study materials from the river. Data analysis and report writing remain to be completed. Passing through a 4" dredge did not cause immediate mortality to two species of freshwater mussels, but some mortality was seen in mussels buried under approximately 12" of gravel regardless of whether they passed through the dredge prior to being buried.

**WDFW Off-Channel Habitat Data Published in Scientific Journal:** Chris Detrick and Dave King worked with NOAA-Fisheries and Tribal staff to compile their 20+ years of off-channel data and project experience into a recently published paper: "Roni, Phil, Sarah Morley, Patsy Garcia, Chris Detrick, Dave King and Eric Beamer. 2006. Coho salmon smolt production from constructed and natural floodplain habitats. *The Transactions of the American Fisheries Society* 135:1398-1408." The paper is best summarized by the abstract:

Abstract – We examined existing smolt trapping data from 30 constructed and natural floodplain habitats to determine whether the number (production), density, and length of coho salmon *Oncorhynchus kisutch* smolts varied by project type and area. At 13 of the 30 sites we conducted detailed physical surveys to examine how morphology (shoreline irregularity), depth, and cover influenced smolt density and length. Mean smolt production for all sites averaged 2,492, density 0.37 smolts/m<sup>2</sup>, and length 98.9 mm. We found no significant difference in smolt production or density between natural and constructed sites or among project types. Smolt length differed by project type and morphology, excavated ponds (gravel pits and mill ponds) producing significantly larger smolts than constructed groundwater or natural channels. Smolt production was positively correlated with wetted area. Smolt length was negatively correlated with density and distance from salt water, suggesting that sites further inland with cooler water temperatures had higher densities and smaller fish. Site perimeter, shoreline irregularity, depth, and percent cover were not significantly different among habitat types at intensively sampled sites, nor were they correlated with smolt production or smolt density. However, multiple regression analysis indicated that shoreline irregularity and percent cover explained 70% of the variation in smolt length.

### **Evaluating the Use of Side-Scanning Sonar as a Means to Estimate Adult Salmon**

**Abundance in Rivers:** Unit staff members in conjunction with NOAA-Fisheries personnel are examining the feasibility of using side scanning sonar to estimate adult salmon abundance in Washington rivers. Preliminary work has taken place in the Skykomish River, near Sunset Falls. Video equipment is being used to help validate fish counts. Additional locations in Puget Sound streams and elsewhere will be used to evaluate the usefulness of this tool for estimating the abundance of adult salmon in freshwaters.

**Shellfish Pot ‘Rot Cord’ Study:** Region 4 and 6 crab management biologists completed a shellfish pot rot cord study last week, with the assistance of staff at the Port Townsend Marine Science Center (PTMSC). The project was designed by the Snohomish Marine Resource Committee (MRC) to test the durability of seven different types of natural line used as rot cord in shellfish pots in Washington. One type of cotton/polyester line was also tested. The project measured how long it took for the different types of rot cord to degrade, when placed in three different arrangements (escape panels, and links to escape rings and tie-down straps). The test gear was set off the dock at the PTMSC and was tested for durability once a week, until the rot cord degraded. The general preliminary results are as follows: 1) The commercial configuration (hook under tension) took slightly longer to degrade (by a week or two) compared to the ring or panel configuration. 2) The ring and panel configuration were equal in degradation rates. 3) Hemp took the least amount of time to degrade (4-7 weeks, depending on thickness), then sisal (7 weeks), then jute (8-10 weeks, depending on thickness), then cotton (8-13 weeks depending on thickness). Stef Frenzl of the Snohomish Marine Resource Committee, urges the WDFW to reconsider the present escape cord guidelines, based on these degradation times. He considers that “Three months in a derelict crab pot may be enough time to kill quite a few crabs (assuming they live 30 days after being trapped)”.

**Microsatellite Identification of captured SF (South Fork) Nooksack Chinook:** WDFW genetics laboratory recently assisted the Lummi Tribe with their efforts to begin a SF Nooksack Spring Chinook supplementation program. Tribal biologists captured 12 adult Chinook from the SF Nooksack River. Our genetics laboratory ran Microsatellite DNA analysis on samples from these 12 fish. Of the 12 fish captured, 8 were NF Nooksack Spring Chinook, 2 were NF (North Fork) Nooksack Fall Chinook, and 2 were identified as NF Chinook, race ambiguous. The rapid turnaround on the analysis allowed the tribe to keep the fish for later spawning. However, based on the genetic information, none of the captured fish were used as broodstock.

**Puget Sound Chinook Recovery Exploitation Rate Reviews:** Fish Program Science Division and IRM staff met internally and with Nisqually tribal and NOAA staff members in an ongoing effort to establish the database to be used for evaluating productivity of Nisqually chinook. These data are to be used to estimate a maximum exploitation rate that is consistent with population rebuilding. The Nisqually chinook recovery exploitation rate (RER) is one of three highest priority management units (population groups) of the listed Puget Sound ESU that are being evaluated by the co-managers with NOAA. Other high priority populations being evaluated are the Skokomish River and the White River spring chinook. Good progress is being made by WDFW and the Muckleshoot and Puyallup tribes evaluating the White River spring population and, while WDFW is making good progress evaluating productivity of Skokomish River chinook, the Skokomish Tribe has failed to meet commitments for this activity defined by the December 2005 Mass Marking agreement.

**Pacific Sardine:** The Pacific Fishery Management Council's Coastal Pelagic Species Management Team (CPSMT) met in a joint session with the Council's Coastal Pelagic Species Subcommittee on the Scientific and Statistical Committee to review the current stock assessment update for Pacific sardine. The CPSMT supported the conclusions from the assessment and will recommend that the Council implement the resulting harvest guideline (HG) for 2007 associated with the harvest control rule stipulated in the Coastal Pelagic Species Fishery Management Plan. Based on a stock biomass (ages 1+) estimate of 1,319,072 metric tons (mt), the HG for U.S. fisheries would be 152,564 mt. This HG recommendation is roughly 28% greater than the HG adopted by the Council for the 2006 fishing year and is over 50,000 mt greater than the largest recent harvest by U.S. fisheries. It appears a substantial portion of the 2006 HG will remain unharvested, largely as a result of poor markets for the small fish that are currently available to the fishery.